

Attachment 2 – Default Quality Assurance Surveillance Plan (QASP) Implementation Plan

Overview

The government uses the Quality Assurance Surveillance Plan (QASP, “kwasp”) to monitor the quality of the Contractor’s performance and deliverables throughout the contract. This QASP provides the government a proactive way to avoid unacceptable or deficient performance and provides the basis for performance ratings in the Performance Assessment Reporting System (CPARS, “see-pars”).

Because there are many acceptable approaches to this contract’s objectives, this QASP provides high-level performance standards and describes their purpose. As part of the contract kick-off process, the Contractor will work with the Contracting Officer Representative (COR) to create a detailed set of performance standards and accompanying methods of assessment that accomplish the standards stated herein. The QASP Implementation Guide shall serve as the default and starting point for revisions.

The COR will perform the assessments detailed in the QASP Implementation Guide, though the COR may choose to delegate tasks to another OPRE staff member where that other staff member has relevant subject matter expertise. It is expected that assessment intervals will begin with a more frequent pace and can be gradually lengthened as the Contractor and government build a collaborative relationship.

The QASP Implementation Guide may be updated at the discretion of the COR and should serve as a living document that reflects the working standards and processes of the team. Updates to these overarching procedures may be made by modification to the contract.

Element 1: Work meets defined acceptance criteria, described within a work inventory

Together with the product owner, this team will be comfortable building and maintaining a work inventory. This work inventory keeps the team on track towards the product vision and serves as a way for stakeholders to track the team’s progress.

At the beginning of each sprint, the product owner and development team will collaborate to define a set of user stories to be completed during the sprint. Acceptance criteria for each story will also be defined. The development team will deliver code and functionality to satisfy these user stories.

The default standards for this element are:

- Project tasks are meaningful and well-scoped, including a definition of done
- Work makes progress towards the project's goal

Element 2: Code is tested

As part of a robust software development practice, the Contractor will ensure that code is working properly. Testing provides feedback to developers in real time, reduces the risk of breaking changes or errors in production, and provides a rough metric to non-technical stakeholders of code quality.

The default standards for this element are:

- Code delivered to OPRE meets a high standard of code coverage
- Tests run automatically before code is deployed, with results available to both OPRE and the Contractor
- Tests simulate variation in data without using production data
- Tests simulate the conditions of the production environment

Element 3: Code is properly styled and well-structured

For maintainability and predictability, the Contractor will ensure that code uses a consistent and thoughtful style. This produces a more maintainable product by allowing developers to work more easily on unfamiliar code and reducing the risks of surprise complexity.

This assessment includes activities like:

- Code linting
- Static analysis and complexity checks
- Code documentation reviews

Default standards for this element are:

- Code is properly styled according to an industry-standard style guide
- Code is well-structured for maintainability and sustainability
- Code includes robust code comments to explain and document the code
- Code style and structure is assessed automatically, with results available to both OPRE and the Contractor

Element 4: Product is accessible for all users

Users will be able to use the product easily with temporary or permanent disabilities. Section 508 provides minimum standards, and Web Content Accessibility Guidelines 2.1 AA standards supply best practices beyond those.

For further information, see Attachment 5 - ACF Security, Privacy, and Task Standard Language for Acquisitions, Section 11: HHS Section 508 Accessibility Standards.

The default standard for this element is:

- Accessibility is ensured throughout development
- Accessibility of machine-readable elements is assessed automatically, with results available to both OPRE and the Contractor

Element 5: Deployment is simple

Code should be deployed frequently and doing so should be an automated process. Deploying to production should be a minor event. With the recognition that even the best-laid plans go awry, rolling back to the previous version should be simple and fast.

For further information about operating an ACF system, see Attachment 5, Section 4: Operations and Maintenance for a Federal IT System.

Default standards for this element are:

- Code successfully builds and deploys into a non-production environment preceding deployment to production
- Code is able to be quickly deployed to any environment with a single brief, documented process
- Deployment to production environment requires passing tests
- Releases can be rolled back quickly and easily

Element 6: Code and development processes are documented

Clear, usable documentation is critical to the success of this work. Having a collaborative plan for creating, updating, and assessing documentation is an important part of this work, and empowering the OPRE team. Specific documentation types may include:

- System documentation, including all elements required by security compliance processes
- Software development documentation, including installation and instructions for use
- Process documentation for any repeated processes, such as software deployments
- User-facing documentation to guide users as they learn and operate the system

As a general guide, any work that is tracked will be documented in some form.

Default standards for this element are:

- Documentation is up-to-date and is directly accessible by both OPRE and the Contractor
- Process documentation is easily usable by new team members

- Code documentation includes all major functionality in the source code
- Code documentation accords with the code styling guide

Element 7: Product is secure

Development will follow best practices for application security. Particular care will be taken to tackle security features early in the development process, rather than attempting to add them in later.

For further information about ACF and federal security standards, see Attachment 5, Section 2: IT Security Requirements.

The default standard for this element is:

- Code is free of known vulnerabilities
- Code is automatically checked for known vulnerabilities, with results available to both OPRE and the Contractor

Element 8: Product is compliant

This product will have oversight from ACF's security team, but is primarily responsible for ensuring compliance with federal requirements and standards. The team is encouraged to take a proactive approach to compliance requirements by working collaboratively with the ACF CIO office in order to avoid unexpected delays.

Compliance standards include:

- NIST 800-53 for security controls
- ACF security requirements
- Section 508 for accessibility
- IDEA Act for development standards
- Records management requirements ACF standards for digital products

For further information about ACF compliance standards, see Attachment 5, Section 2: IT Security Requirements; Attachment 5, Section 3: Hosting of a Federal IT System; Attachment 5, Section 4: Operations and Maintenance for a Federal IT System; Attachment 5, Section 7: Development, Modernization, and Enhancement; Attachment 5, Section 9: Records Management; and Attachment 5, Section 11: HHS Section 508 Accessibility Standards.

Default standards for this element are:

- Compliance tasks are prioritized within the backlog
- System is positioned to pass audits

Element 9: User research informs software development

The work backlog is built from actual user needs. To do this, the team will continue to build on the existing user research throughout the project, and that research should be cumulative as the project progresses. For these purposes, “user” is defined broadly and may include anybody who interacts with the system.

Default standards for this element are:

- User research is guided by a research plan
- Research artifacts are accessible by both OPRE and the Contractor

Element 10: Code and artifacts are available to and accessible by OPRE

The trust needed in a collaborative environment is supported by working in the open and being transparent. The COR will have administrative rights to all tools and locations, which may include:

- Task tracking
- Custom code
- Infrastructure-related metrics and data (e.g. uptime, estimated costs)
- Hosting environments

Default standards for this element are:

- Tools necessary for development and maintenance are accessible by OPRE
- Code is available and usable by OPRE